The Living Fossil (Horseshoe crab)

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CHAPTER -10

Macrobenthic diversity at the Horseshoe Crab nesting ground, Pekan station, Pahang, Malaysia – Part 1

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Abstract

Comprehensive study on the major macrobenthic community composition and its diversity along the nesting grounds of horseshoe crabs in Pekan coast were studied. Here we present the monthly and seasonal variation in the macrobenthic community along the Pekana station during full moon days. Monthly variation in the diversity of macrobenthos at pekan station during full moon days showed that highest diversity of macrobenthic community was observed during January 2011 (Shannon H' = 0.672; Simpson 1/D = 4.6). There was no significant variation in the macrobenthic diversity was observed between monsoon and non monsoon period ($p < 0.05$). Species richness indexes showed that the species richness was higher during Feb-11(Marfalf d = 1.889; McIntosh D = 1.081). Macrobenthos richness was higher during monsoon period compared to non monsoon time. There was no significant variation in the evenness was observed during sampling period which showed the homogeneous distribution of species round the year.

Key words: Horseshoe crab, Macrobenthos, Nesting ground, Pekan station, Diversity Indices

Introduction

The sustaining of the so-called biological diversity is a priority of nature conservation in terrestrial, marine and freshwater environments (Brooks *et al.* 2006). Therefore, the assessment of biological diversity and its probably most important element – taxonomic diversity plays a very significant role as the basis for nature protection. On the other hand, various indices expressing the biological diversity of chosen groups of organisms are used as common metrics in